

53735-14

10/24/2013

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
 Office of Pesticide Programs  
 Antimicrobials Division (7510P)  
 1200 Pennsylvania Avenue NW  
 Washington, D.C. 20460

EPA Reg. Number:

53735-14

Date of Issuance:

OCT 24 2013

Term of Issuance:

**Conditional**

Name of Pesticide Product:

Spa Chlorine Disinfectant

**NOTICE OF PESTICIDE:**

Registration  
 Reregistration  
 (under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Mrs. Abigail T. Downs  
 Technology Sciences Group, Inc.  
 Agent for King Technology  
 530 11th Avenue South  
 Hopkins, MN 55343

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

The application referred to above, submitted under the Federal Insecticide, Fungicide and Rodenticide Act, as amended is acceptable under FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. Submit a one-year study required to satisfy the storage stability and corrosion characteristics requirements (Guidelines 830.6317 and 830.6320). You have 18 months from the date of registration to provide these data.

A stamped copy of your labeling is enclosed for your records. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling.

Signature of Approving Official:

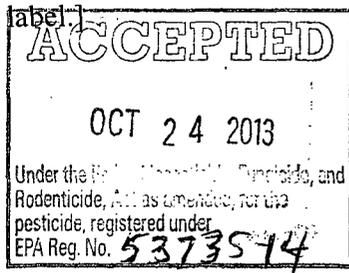
Demson Fuller  
 Acting Product Manager Team 32  
 Regulatory Management Branch II  
 Antimicrobials Division (7510P)

Date:

OCT 24 2013

[All text in brackets {xxx} is optional and may or may not be included on a final label.]

[All text in braces [xxx] is administrative and will not appear on a final label.]



**[MASTER LABEL]**

**SPA CHLORINE DISINFECTANT  
Prefilled Chlorine Spa Sanitizer**

**Active Ingredient:**

1,3-dichloro-5, 5-Dimethylhydantoin.....	81.1%
1,3-dichloro-5-ethyl-5-methylhydantoin.....	16.1%
Other Ingredients:.....	2.8%
Total: .....	100.0%

**Keep Out of Reach of Children**

**DANGER**

**SEE FIRST AID AND PRECAUTIONARY  
STATEMENTS ON BACK PANEL**

EPA Reg. No.: 53735-xx  
 EPA Est. No.: xxxxx-xx

Distributed By: King Technology, Inc.  
 530 11<sup>th</sup> Ave S  
 Hopkins, MN 55343

Net Wt.: xxx grams

**FIRST AID:** If in Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. If Swallowed: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

**IN CASE OF MEDICAL EMERGENCY CALL 1-800-424-9300.**

**PRECAUTIONARY STATEMENTS:**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS:** DANGER: Highly Corrosive. Causes eye and skin damage. May be fatal if swallowed. Do not get in eyes, on skin or on clothing. Wear goggles or safety glasses and rubber gloves when handling product. Irritating to nose and throat. Avoid breathing dust and fumes. Remove and wash contaminated clothing before reuse.

**PHYSICAL AND CHEMICAL HAZARDS:** STRONG OXIDIZING AGENT: Do not mix with other chemicals. Mix only with water. Never add water to product. Always add product to large quantities of water. Use clean dry utensils. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire and explosion. Contamination with moisture, organic matter or other chemicals will start a chemical reaction and generate heat, hazardous gas, possible fire and explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well-ventilated area. Flood area with large volumes of water.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish and aquatic organisms.

**Note:** Buyer assumes all responsibility for safety and use not in accordance with directions.

**Product Description:** The SPA CHLORINE DISINFECTANT is a {innovative} {revolutionary} way to maintain a low level of {chlorine} {sanitization} {disinfection} {tailor made} {perfect} for use with the Spa Frog Mineral Cartridge that reduces chlorine use. The SPA CHLORINE DISINFECTANT {may be} {is} used in the {In-line Spa System or} {Floating Spa System} for weeks of low level {chlorine} {sanitization} {disinfection} protection. Together they make spa care a breeze with up to 75%\* less chlorine so the water feels softer and looks crystal clear with no smelly odors. Swimsuit colors stay bright and spa surfaces maintain their brilliance longer. Experience the difference minerals and SPA CHLORINE DISINFECTANT will make in your spa.

**Directions for Use:** It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Ensure all spa equipment is working properly. The pump and filter should be operated for at least 3 hours per day. Clean filter following manufacturer's directions. Fill spa with fresh water and balance the water according to the water balance guidelines with pH between 7.2 – 7.8 and total alkalinity at 60 to 120 ppm. After balancing, establish a free chlorine residual of 0.5 to 1.0 ppm in the spa with FROG Jump Start or an EPA approved spa shock following the directions for that product. When using other products as outlined in directions for this product, always follow directions on those products.

**Setting the Output:** The SPA CHLORINE DISINFECTANT is prefilled and adjustable to meet the needs of each spa use. Typically In-Line System users will begin on setting # while Floating System users will begin on setting # and adjust up or down from there. Hold the bottom and turn the top of the cartridge until the correct number appears in the setting window. See the setting chart in the manual for best results.

Then use SPA CHLORINE DISINFECTANT into {one of} the following system{s}:

**{The In-line Mineral Spa System:** Open cap of Inline System, push down and turn cartridge holder counter-clockwise to unlock. Pull holder out. Snap cartridge into {lower} {bottom} section {marked "Bromine or Chlorine Only"}. Make sure to line up indent on cartridge with raised line on holder. After cartridge is snapped in, replace holder by lining up arrow on holder with arrow on system lip, push down and lock in place. Replace cap.}

**The Floating Mineral Spa System:** Push the cartridge into the bottom opening of the Floating Spa System and place entire system in the spa water.

When using the Spa Frog Mineral Cartridge, maintain a free chlorine level of 0.5 – 1.0 ppm. Initially monitor free chlorine levels daily and adjust the cartridge up or down by one setting per day until the desired chlorine level is achieved. Adjusting to a higher setting will increase the chlorine output while a lower setting will decrease it. When empty follow disposal instructions and replace with a new SPA CHLORINE DISINFECTANT.

Shock the spa or add clarifier occasionally if the water should become cloudy. With SPA CHLORINE DISINFECTANT less shocking is required because of the chlorine bank (measured as total chlorine) that is ready to use when needed.

**REENTRY into treated spas is prohibited above levels of 5 ppm available{free} chlorine as measured by a suitable test kit due to risk of bodily injury.**

**STORAGE AND DISPOSAL:** Keep this product dry in original tightly closed container when not in use. Store in a cool, dry, well-ventilated area away from heat. Moisture may decompose this product and cause a violent reaction leading to fire and explosion. In case of decomposition, isolate container if possible and flood area with large amounts of water to dissolve material before discarding this container. Do not contaminate food or feed by storage and disposal.

**CONTAINER DISPOSAL:** Do not reuse container, but place in trash collection. Rinse thoroughly before discarding in trash.

[Disclaimers]

\* Compared to the ANSI minimum recommended chlorine level of 2.0 ppm for a residential spa.

\*\* Compared to daily shocking or shocking each time the spa is used

**[Operational Instructions for In-Line Mineral Spa System]**

**[All text is optional]**

**In-Line System Operating Instructions**

**Congratulations!**

Your spa came with a complete mineral and or chlorine {sanitation} {disinfecting} {disinfection} system. When using the patented Spa Frog Mineral Cartridge with the proprietary SPA CHLORINE DISINFECTANT, you'll enjoy your spa more with less work and less chlorine.

**Less Work Because:**

- The Frog Mineral {System} {Technology} {Formula}+ continuously works to control bacteria for four full months.
- Cartridges last longer to eliminate daily maintenance.
- Cartridges are pre-filled for no measuring or mess.
- Simply adjust to your setting and relax for weeks {until it's time to replace the {chlorine} cartridge}.

**Less Chlorine Because:**

- With minerals in the water, chlorine use is cut by up to 75%.\*
- It's precisely metered over : 2-4 weeks so it lasts longer (on a 350 gallon spa with average use).
- With minerals and low levels of chlorine, the water feels softer.
- The system reduces odors and leaves the water crystal clear.

You're going to love your FROG System. If you have any questions, contact our customer service representatives at **800-222-0169**.

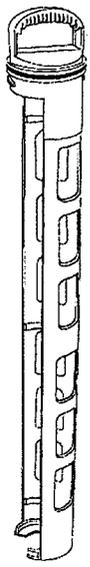
\* Compared to the minimum ANSI recommended chlorine level of 2.0 ppm for a spa.

**Let Us Dissect This Frog For You: The complete In-Line System**

The In-Line System is made up of (A) a cap that is easily distinguishable among the fittings on the top {rim} {edge} of the spa, (B) a cartridge holder that pulls out of the system, (C) a mineral cartridge that helps control bacteria in the water and (D) a {chlorine} {sanitizer} {disinfectant} cartridge that helps support the minerals while oxidizing contaminants like body oils {and ammonia compounds responsible for smelly chloramines}. The cartridges are adjustable to meet your specific spa water care needs.



A. Frog Cap



B. Cartridge Holder

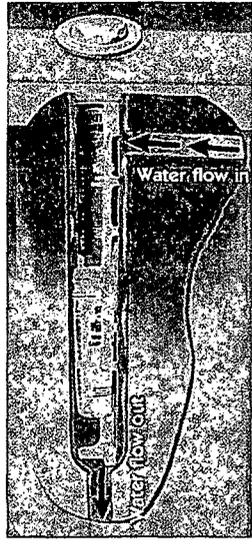


C. Mineral Cartridge



D. {Chlorine} {Sanitizer} {Disinfectant} Cartridge

Cut-away view of cartridges snapped into holder and placed into the In-Line System.



**Start Up** · Follow all directions from your spa manufacturer on filling and balancing the water in your spa. Standard guidelines for balancing the water are as follows:

Water Balance Guidelines	
pH:	7.2-{7.6} {7.8}
Total Alkalinity:	60-120 ppm
Calcium Hardness:	150-400
Total Dissolved Solids:	<1500
*Free Chlorine:	0.5-1.0 ppm

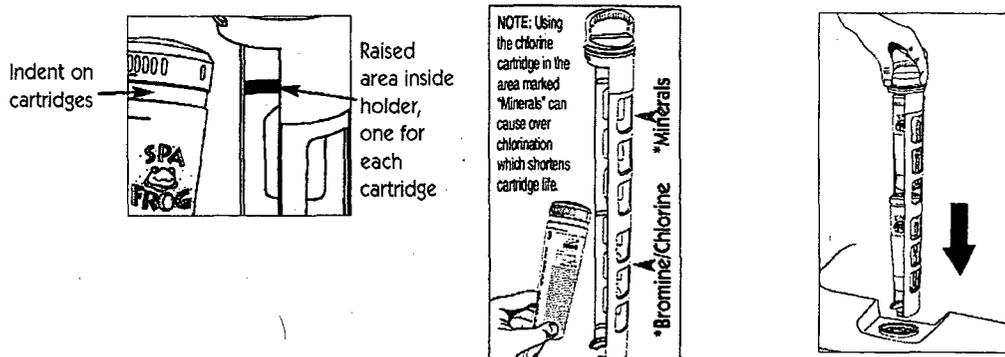
\*NOTE: Free chlorine levels are reduced up to 75%\* when using Frog minerals

- Use a metal out or sequestering agent if fill water is high in metals. Wait 24 hours before continuing start up.
- **Very Important!** {Shock spa to establish a 0.5-1.0 ppm free chlorine residual. Add directly to spa following manufacturers' directions.} {Before using cartridges, establish an initial residual of 0.5-1.0 ppm free chlorine with a chlorine shock.} {For best results use Frog Jump Start start-up spa shock packet that quickly dissolves with an effervescent fizzing action – one packet per 500 gallons} {Do not use a non-chlorine shock.} Do NOT add through the In-Line System. Use {the appropriate chlorine test strips or kit and follow manufacturer's instructions.} {Frog Brand Test Strips to accurately maintain the reduced 0.5 to 1.0 ppm chlorine level following the label directions carefully.}
- When spa reaches operating temperature per your spa manufacturer's directions, set the mineral and {chlorine} {sanitizer} {disinfectant} cartridges according to directions on page # and insert them into the System.

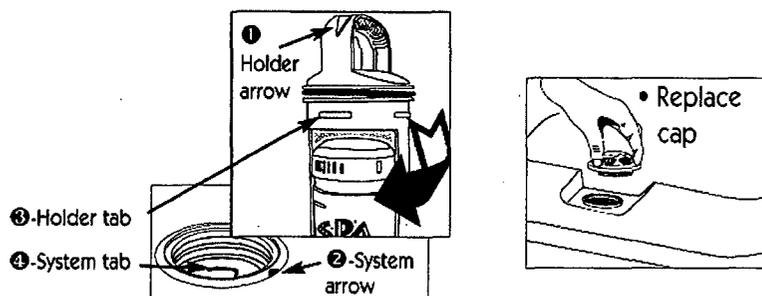
**Replacing Cartridges**

- Open cap of In-Line System and set aside. DO NOT OPEN CAP WHILE JETS ARE ON.
- Remove holder by pushing down and turning counterclockwise before pulling out.

- Remove spent cartridges by pushing bottom out through openings in back of holder. Then grab cartridge and pull out.
- Snap the Spa Frog Mineral Cartridge into the area marked "Minerals" (top portion) and the SPA CHLORINE DISINFECTANT into the area marked "Bromine or Chlorine" (bottom portion) making sure to line up the indentation at the top of the cartridges with the raised area on the holder.



- Slowly insert holder into system (see diagrams). Line up holder arrow-① with system arrow-②. Push down until holder tabs-③ go past system tabs-④ and turn holder to the right (clockwise) until it stops. To ensure a locked position, attempt to pull holder up. If it stays in place, the lock is secure.



- Begin regular spa care procedures (see page #) as soon as start-up is complete.

#### **Adjusting and When to Replace Spa Frog Mineral Cartridge:**

- Set the {color} Spa Frog Mineral Cartridge wide open on #6 by holding the bottom and turning the top until the number 6 appears in the setting window. No further adjustments are necessary.
- The Spa Frog Mineral Cartridge must be replaced every 4 months. After four months of use, or when draining and refilling the spa with fresh water, discard Spa Frog Mineral Cartridge in trash even if, upon shaking, it appears there is spent media left inside. Once wetted the time released minerals in the cartridge are effective up to four months. Do not attempt to reuse the product once removed from the spa. For ease in remembering, mark your calendar with the Reminder Stickers included with this manual {See spa manufacturer's draining recommendations.}

**Adjusting and When to Replace SPA CHLORINE DISINFECTANT:**

As every spa is different, finding the right setting for the {chlorine} {sanitizer} {disinfectant} cartridge will require monitoring your usage for the first week or two. Begin with an initial setting based on the chart {below} {on page #} and monitor free chlorine levels daily or before each use, adjusting the cartridge by one setting per day until a 0.5-1.0 ppm level has been achieved. {Use Frog Brand Test Strips with the ideal Frog chlorine range clearly marked on the label.} To adjust cartridge, remove from system and turn to the next highest setting if the chlorine level is low, or the next lower setting if the chlorine level is high. The {chlorine} {sanitizer} {disinfectant} cartridge needs to be replaced when empty. Drain water to ensure empty then discard in trash. On most spas, it will last between 2 and 4 weeks. Always maintain at least 0.5 ppm free chlorine level.

**INITIAL START-UP SETTING**

	Spa Size (Gallons)		
Daily Filter Time	250-300	300-400	400-500
One Hour	X	X	X
Two Hours	X	X	X
Four Hours	X	X	X
24 hour @ low flow	X	X	X

NOTE: The more you use the spa, for instance when you first get it, the greater the setting to achieve at least 0.5 ppm. (This may require a higher setting than what is listed in the chart.) If usage decreases or the chlorine level is greater than 1.0 ppm, lower the setting.

**Regular Spa Care Procedures:**

Always follow the directions for operating your particular spa.

- Run filtration system as directed by your spa manufacturer to maintain proper water flow through the In-Line System.
- Regularly test water for pH, total alkalinity and free chlorine levels {with the precise Frog Brand Test Strips}. Maintain at least a 0.5 ppm of free chlorine at all times. The SPA CHLORINE DISINFECTANT forms a chlorine bank that is measured as total chlorine on your test strip/kit. This chlorine bank readily shifts to free chlorine as needed to maintain {a desirable} {our recommended} low level of chlorine {available for disinfection}.
- Shock the spa {with granular chlorine or a non-chlorine shock} if the water looks cloudy or add a spa clarifier according to label directions. With SPA CHLORINE DISINFECTANT, far less shocking is required compared to standard water treatments that require weekly shocking.
- Remember to replace your Spa Frog Mineral Cartridge and SPA CHLORINE DISINFECTANT as directed under "Adjusting and When to Replace".
- Lubricate o-ring twice a year with a silicone lubricant.

**[Operational Instructions for Floating Mineral Spa System]**  
**[All text is optional]**

**Floating System Operation Instructions**

Congratulations! Your spa came with a complete mineral and chlorine {sanitation} {disinfecting} {disinfection} system. When using the patented Spa Frog Mineral Cartridge with the {proprietary} SPA CHLORINE DISINFECTANT, you'll enjoy your spa more with less work and less chlorine {or chlorine}.

**Less Work Because:**

- The Frog Mineral {System} {Technology} {Formula}+ continuously works to control bacteria for four full months.
- Cartridges last longer to eliminate daily maintenance.
- Cartridges are pre-filled for no measuring or mess.
- Simply adjust to your settings and relax {for weeks} {until it's time to replace the {chlorine} cartridge}.

**Less Chlorine Because:**

- With minerals in the water, chlorine use is cut by up to 75%.\*
- Chlorine lasts longer: 2-4 weeks on a 350 gallon spa with average use.
- With minerals and low levels of chlorine, the water feels softer.
- The system reduces odors and leaves the water crystal clear.

You're going to love your Frog System. If you have any questions, contact our customer service representatives at **800-222-0169**.

\* Compared to the minimum ANSI recommended chlorine level of 2.0 ppm for a spa.

**Spa Start Up**

- Always drain and refill spa at least every 4 months.
- Clean and replace filter cartridges when dirty (*Follow manufacturer's instructions*).
- Balance water according to the chart.

NOTE: Free Chlorine levels are reduced up to 75%\* when using Frog minerals

Water Balance Guidelines	
pH:	7.2 – {7.6} {7.8}
Total Alkalinity:	60 – 120 ppm
Calcium Hardness:	150-400
Total Dissolved Solids:	<1500
*Free Chlorine:	0.5 – 1.0 ppm

- Heat water to recommended temperature before using cartridges.
- **Very Important!** Before using cartridges, establish an initial residual of 0.5-1.0 ppm free chlorine with a chlorine shock. {For best results use Frog Jump Start start-up spa shock packet that quickly dissolves with an effervescent fizzing action – one packet per 500 gallons.} {Do not use a non-chlorine shock.} Use {the appropriate chlorine test strips or kit and follow manufacturer's instructions.} {Frog Brand Test Strips to accurately maintain the reduced 0.5 to 1.0 ppm chlorine level following the label directions carefully.}
- Begin regular spa care procedures (see back page) as soon as start-up is complete.

**Setting Cartridges**

- Set the {color} mineral cartridge to wide open on #6 by holding the bottom and turning the top until the number 6 appears in the setting window. No further adjustments are necessary. With a freshly filled spa, initially set the {color} {chlorine} {sanitizer} {disinfectant} cartridge on setting #x. For the first week, before each use, test the water {with Frog Brand Test Strips} and adjust cartridge by 1 setting per day until the {free chlorine stabilizes to at least 0.5 ppm.} {color on the test strip matches the ideal {Frog} free chlorine range of 0.5 to 1.0 ppm.}

**Using the Floating System**

- Insert both cartridges into the green floating holder by pushing them into the openings until they stay in place.
- Let the Floating System free-float in the spa.
- When using the spa, simply remove the system, drain most of the water into the spa and set on the side of the spa inverted so all excess water drains into the holder. REMEMBER TO REPLACE {THE FLOATING SYSTEM} {IT} BACK IN THE WATER WHEN FINISHED USING SPA!

**Replacing Cartridges**

- The Spa Frog Mineral Cartridge must be replaced every 4 months. After four months of use, or when draining and refilling the spa with fresh water, discard Spa Frog Mineral Cartridge in trash even if, upon shaking, it appears there is spent media left inside. Once wetted the time released minerals in the cartridge are effective up to four months. Do not attempt to reuse the product once removed from the spa. For ease in remembering to replace, mark your calendar with the reminder stickers provided with product.
- Replace the {chlorine} {sanitizer} {disinfectant} cartridge when empty. Drain water to ensure cartridge is empty then discard in trash {or offer for recycling}. The cartridge life will vary depending on spa size and number of users. Once your usage is determined, mark the calendar with enclosed reminder stickers.

**Regular Spa Care**

- Run filtration system as recommended by your spa manufacturer.
- Regularly test water for pH, total alkalinity and free chlorine levels {with the precise Frog Brand Test Strips.}
- Maintain at least a 0.5 ppm free chlorine level at all times. The SPA CHLORINE DISINFECTANT forms a chlorine bank that is measured as total chlorine on your test strip/kit. This chlorine bank readily shifts to free chlorine as needed to maintain {a desirable} {our recommended} low level of chlorine {available for disinfection}.
- Shock the spa {with granular chlorine or a non-chlorine shock} if the water looks cloudy or add a spa clarifier according to label directions. With SPA CHLORINE DISINFECTANT, far less shocking is required compared to standard water treatments that require weekly shocking.

Remember to replace Spa Frog Mineral Cartridge and SPA CHLORINE DISINFECTANT as directed under "Replacing Cartridges".

**[All text on this page is optional]**

A perfect companion to {minerals} {reduced chlorine systems}

The chlorine that makes it easy to maintain 0.5 ppm free chlorine.

Don't just use chlorine – use {less!} {chlorine with a {twist} {difference} {distinction}}

The controlled-release chlorine {that's ready when {you need it} {needed}} {that lasts for weeks}

Ideal for high bather loads as chlorine is ready when {you need it} {needed}

A more efficient way to use chlorine {that} {to} disinfect{s} and oxidize{s}

Reduces {free} chlorine use up to 75%\* {when used with FROG minerals}

The low-chlorine solution for FROG mineral systems

SPA CHLORINE DISINFECTANT dissolves slower than standard chlorine products making it easier to maintain a low level, and easier to avoid over chlorination

Reduces the need to shock

No shocking needed before or after spa use

Reduces shocking by up to 75%\*\*

Less work with prefilled cartridges, precise output and {fewer} {minimal} shock treatments

The chlorine {that actually helps maintain a neutral pH} {with a built-in pH stabilizer}

{Because} {When} {the} {your} pH {stays} {is} neutral, {the} {your} {free} chlorine is {more effective} {at its best}.

With fewer pH adjustments and less shocking required, SPA CHLORINE DISINFECTANT uses less chemicals than standard spa water treatments

Reduces overall chemical use with less shocking and pH adjustments

SPA CHLORINE DISINFECTANT {cartridge} contains chlorine but with a {positive} {beneficial} {innovative} twist

- It reduces the potential for pH decline
- It prevents smelly {chloramine} odors
- It nearly eliminates shocking
- It helps prevent over chlorinating {It lasts longer when used with minerals}
- {With minerals, it lasts longer}

The SPA CHLORINE DISINFECTANT forms a chlorine bank that is measured using a total chlorine test. This chlorine bank readily shifts to free chlorine as needed to maintain a desirable low level of chlorine available for disinfection.

Unlike {all} other chlorines, there is no need to shock when the total chlorine is twice the level of the free chlorine. Instead, the chlorine bank, (measured as total chlorine) is waiting to shift to free chlorine as {needed} {it is depleted}. This also allows for the SPA CHLORINE DISINFECTANT {to oxidize odor causing contaminants {like chloramines}} {to nearly eliminate odor causing contaminants} from your spa water.

When testing your water, there is no need to compare the total chlorine level to the free. Simply maintain a low 0.5-1.0 ppm free chlorine at all times. However if you notice your total chlorine dropping, that is a good sign that the cartridge may be getting{nearly} empty.

SPA CHLORINE DISINFECTANT {boosts the concentration of} {super charges} FROG minerals for even greater effectiveness

The {combination} of FROG minerals and SPA CHLORINE DISINFECTANT is very effective in hot water environments as it is easier to maintain a low chlorine level.